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1 **Phonetic set indexing for fast lexical access**
Sarukkai, R.R.; Ballard, D.H.;
Pattern Analysis and Machine Intelligence, IEEE Transactions on , Volume:
20 , Issue: 1 , Jan. 1998
Pages:78 - 82

[Abstract]   [PDF Full-Text (124 KB)]   **IEEE JNL**

2 **A parallel computing approach to creating engineering concept spaces
for semantic retrieval: the Illinois Digital Library Initiative project**
Hsinchun Chen; Schatz, B.; Ng, T.; Martinez, J.; Kirchhoff, A.; Chienting Lin;
Pattern Analysis and Machine Intelligence, IEEE Transactions on , Volume:
18 , Issue: 8 , Aug. 1996
Pages:771 - 782

[Abstract]   [PDF Full-Text (1472 KB)]   **IEEE JNL**

3 **Multilingual thesauri development and application**
Tuzovsky, A.; Bubnov, D.; Kozlov, S.;
Science and Technology, 2003. Proceedings KORUS 2003. The 7th Korea-Russia
International Symposium on , Volume: 2 , 28 June-6 July 2003
Pages:405 - 409 vol.2

[Abstract]   [PDF Full-Text (375 KB)]   **IEEE CNF**

4 **Using color concepts in the retrieval of color artistry**
Lay, J.A.; Guan, L.;
Electrical and Computer Engineering, 2003. IEEE CCECE 2003. Canadian
Conference on , Volume: 2 , 4-7 May 2003
Pages:1175 - 1178 vol.2

[Abstract]   [PDF Full-Text (422 KB)]   **IEEE CNF**

5 **Fast latent semantic indexing   f sp ken d cuments by using self-**

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rganizing maps
Kurimo, M.;
Acoustics, Speech, and Signal Processing, 2000. ICASSP '00. Proceedings. 2000
IEEE International Conference on , Volume: 6 , 5-9 June 2000
Pages:2425 - 2428 vol.4

[Abstract]   [PDF Full-Text (484 KB)]   **IEEE CNF**

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6 **Java interface to human anatomy knowledge**
Cerveri, P.; Masseroli, M.; Pinciroli, F.;
Euromicro Conference, 2000. Proceedings of the 26th , Volume: 2 , 5-7 Sept. 2000

Pages:384 - 390 vol.2

[Abstract]   [PDF Full-Text (948 KB)]   **IEEE CNF**

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7 **A neural network model for information retrieval using latent semantic indexing**
Inien Syu; Lang, S.D.; Deo, N.;
Neural Networks, 1996., IEEE International Conference on , Volume: 2 , 3-6 June
1996
Pages:1318 - 1323 vol.2

[Abstract]   [PDF Full-Text (428 KB)]   **IEEE CNF**

---

8 **Keyword spotting for video soundtrack indexing**
Gelin, P.; Wellekens, C.J.;
Acoustics, Speech, and Signal Processing, 1996. ICASSP-96. Conference
Proceedings., 1996 IEEE International Conference on , Volume: 1 , 7-10 May 1996
Pages:299 - 302 vol. 1

[Abstract]   [PDF Full-Text (332 KB)]   **IEEE CNF**

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9 **Keyword spotting enhancement for video soundtrack indexing**
Gelin, P.; Wellekens, C.J.;
Spoken Language, 1996. ICSLP 96. Proceedings., Fourth International Conference
on , Volume: 2 , 3-6 Oct. 1996
Pages:586 - 589 vol.2

[Abstract]   [PDF Full-Text (344 KB)]   **IEEE CNF**

---

10 **Using indexing structures for resource descriptors extraction from distributed image repositories**
Berretti, S.; Del Bimbo, A.; Pala, R.;
Multimedia and Expo, 2002. ICME '02. Proceedings. 2002 IEEE International
Conference on , Volume: 2 , 26-29 Aug. 2002
Pages:197 - 200 vol.2

[Abstract]   [PDF Full-Text (512 KB)]   **IEEE CNF**

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11 **Building a latent semantic index f an image database fr m patterns f relevance feedback**
Heisterkamp, D.R.;
Pattern Recognition, 2002. Proceedings. 16th International Conference
on , Volume: 4 , 2002
Pages:134 - 137 vol.4

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[Abstract]   [PDF Full-Text (548 KB)]   **IEEE CNF**

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12 **Meth d l gy f r creating a sample subset f dynamic tax n my t use in navigating medical text databases**
Wollersheim, D.; Rahayu, W.;
Database Engineering and Applications Symposium, 2002. Proceedings.
International , 17-19 July 2002
Pages:276 - 284

[Abstract]   [PDF Full-Text (374 KB)]   **IEEE CNF**

---

13 **Fuzzy object patterns for visual indexing and segmentation**
Joo-Hwee Lim;
Fuzzy Systems, 2001. The 10th IEEE International Conference on , Volume: 1 , 2-5
Dec. 2001
Pages:77 - 80

[Abstract]   [PDF Full-Text (421 KB)]   **IEEE CNF**

---

14 **The MPEG-7 colour structure descriptor: image description using colour and local spatial information**
Messing, D.S.; van Beek, P.; Errico, J.H.;
Image Processing, 2001. Proceedings. 2001 International Conference on , Volume:
1 , 7-10 Oct. 2001
Pages:670 - 673 vol.1

[Abstract]   [PDF Full-Text (368 KB)]   **IEEE CNF**

---

15 **Multi-scale-audio indexing for translingual spoken document retrieval**
Hsin-Min Wang; Meng, H.; Schone, P.; Chen, B.; Wai-Kit Lo;
Acoustics, Speech, and Signal Processing, 2001. Proceedings. (ICASSP '01). 2001
IEEE International Conference on , Volume: 1 , 7-11 May 2001
Pages:605 - 608 vol.1

[Abstract]   [PDF Full-Text (408 KB)]   **IEEE CNF**

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1 Technical reports
SIGACT News Staff
January 1980 **ACM SIGACT News**, Volume 12 Issue 1

Full text available: 📄 pdf(5.28 MB)   Additional Information: full citation

2 A compact row storage scheme for Cholesky factors using elimination trees
Joseph W. Liu
June 1986 **ACM Transactions on Mathematical Software (TOMS)**, Volume 12 Issue 2

Full text available: 📄 pdf(1.47 MB)   Additional Information: full citation, abstract, references, citings, index terms, review

For a given sparse symmetric positive definite matrix, a compact row-oriented storage scheme for its Cholesky factor is introduced. The scheme is based on the structure of an elimination tree defined for the given matrix. This new storage scheme has the distinct advantage of having the amount of overhead storage required for indexing always bounded by the number of nonzeros in the original matrix. The structural representation may be viewed as storing the minimal structure of the given matr ...

3 Optimization of parser tables for portable compilers
Peter Dencker, Karl Dürre, Johannes Heuft
October 1984 **ACM Transactions on Programming Languages and Systems (TOPLAS)**, Volume 6 Issue 4

Full text available: 📄 pdf(1.53 MB)   Additional Information: full citation, references, citings, index terms, review

4 Technique for automatically correcting words in text
Karen Kukich
December 1992 **ACM Computing Surveys (CSUR)**, Volume 24 Issue 4

Full text available: 📄 pdf(6.23 MB)   Additional Information: full citation, abstract, references, citings, index terms, review

Research aimed at correcting words in text has focused on three progressively more difficult problems:(1) nonword error detection; (2) isolated-word error correction; and (3) context-dependent work correction. In response to the first problem, efficient pattern-matching and n-gram analysis techniques have been developed for detecting strings that do not appear in a given word list. In response to the second problem, a variety of general and application-specific spelling cor ...

Keyw rds: n-gram analysis, Optical Character Recognition (OCR), context-dependent spelling

correction, grammar checking, natural-language-processing models, neural net classifiers, spell checking, spelling error detection, spelling error patterns, statistical-language models, word recognition and correction

5 Optimizing memory usage in the polyhedral model

Fabien Quilleré, Sanjay Rajopadhye
September 2000 **ACM Transactions on Programming Languages and Systems (TOPLAS)**, Volume 22 Issue 5

Full text available: ᄇ pdf(411.82 KB)   Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>citings</u>, <u>index terms</u>, <u>review</u>

The polyhedral model provides a single unified foundation for systolic array synthesis and automatic parallelization of loop programs. We investigate the problem of memory reuse when compiling Alpha (a functional language based on this model). Direct compilation would require unacceptably large memory (for example O(n3) for matrix multiplication). Researchers have previously addressed the problem of memory reuse, and the analysis that t ...

Keywords: affine recurrence equations, applicative (functional) languages, automatic parallelization, data-parallel languages, dataflow analysis, dependence analysis, lifetime analysis, memory management, parallel code generation, polyhedral model, scheduling

6 Fast detection of communication patterns in distributed executions

Thomas Kunz, Michiel F. H. Seuren
November 1997 **Proceedings of the 1997 conference of the Centre for Advanced Studies on Collaborative research**

Full text available: ᄇ pdf(4.21 MB)   Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>index terms</u>

Understanding distributed applications is a tedious and difficult task. Visualizations based on process-time diagrams are often used to obtain a better understanding of the execution of the application. The visualization tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diagrams are often very complex and do not provide the user with the desired overview of the application. In our experience, such tools display repeated occurrences of non-trivial commun ...

7 Next-generation generic programming and its application to sparse matrix computations

Nikolay Mateev, Keshav Pingali, Paul Stodghill, Vladimir Kotlyar
May 2000   **Proceedings of the 14th international conference on Supercomputing**

Full text available: ᄇ pdf(1.06 MB)   Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>citings</u>, <u>index terms</u>

The contributions of this paper are the following.We introduce a new variety of generic programming in which algorithm implementors use a different API than data structure designers, the gap between the API's being bridged by restructuring compilers. One view of this approach is that it exploits restructuring compiler technology to perform a novel kind of template instantiation.We demonstrate the usefulness of this new generic programming technology ...

8 Clustering: Document clustering based on non-negative matrix factorization

Wei Xu, Xin Liu, Yihong Gong
July 2003   **Proceedings of the 26th annual international ACM SIGIR conference on Research and development in informaion retrieval**

Full text available: ᄇ pdf(216.50 KB)   Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>index terms</u>

In this paper, we propose a novel document clustering method based on the non-negative factorization of the term-document matrix of the given document corpus. In the latent semantic space derived by the non-negative matrix factorization (NMF), each axis captures the base topic of a particular document cluster, and each document is represented as an additive combination of the base topics. The cluster membership of each document can be easily determined by finding the base topic (the axis) with w ...

Keywords: document clustering, non-negative matrix factorization

9 Inverted files versus signature files for text indexing

Justin Zobel, Alistair Moffat, Kotagiri Ramamohanarao
December 1998 **ACM Transacti ns on Database Systems (TODS)**, Volume 23 Issue 4

Full text available: pdf(243.62 KB)   Additional Information: full citation, abstract, references, citings, index terms

Two well-known indexing methods are inverted files and signature files. We have undertaken a detailed comparison of these two approaches in the context of text indexing, paying particular attention to query evaluation speed and space requirements. We have examined their relative performance using both experimentation and a refined approach to modeling of signature files, and demonstrate that inverted files are distinctly superior to signature files. Not only can inverted files be used to ev ...

Keywords: indexing, inverted files, performance, signature files, text databases, text indexing

10 The design and implementation of a new out-of-core sparse cholesky factorization method

Vladimir Rotkin, Sivan Toledo
March 2004 **ACM Transactions on Mathematical Software (TOMS)**, Volume 30 Issue 1

Full text available: pdf(457.74 KB)   Additional Information: full citation, abstract, references, index terms

We describe a new out-of-core sparse Cholesky factorization method. The new method uses the elimination tree to partition the matrix, an advanced subtree-scheduling algorithm, and both right-looking and left-looking updates. The implementation of the new method is efficient and robust. On a 2 GHz personal computer with 768 MB of main memory, the code can easily factor matrices with factors of up to 48 GB, usually at rates above 1 Gflop/s. For example, the code can factor audikw, currenly the lar ...

Keywords: out-of-core

11 A framework for sparse matrix code synthesis from high-level specifications

Nawaaz Ahmed, Nikolay Mateev, Keshav Pingali
November 2000 **Proceedings of the 2000 ACM/IEEE conference on Supercomputing (CDROM)**

Full text available: pdf(140.18 KB)   Additional Information: full citation, abstract, references, citings, index terms
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We present compiler technology for synthesizing sparse matrix code from (i) dense matrix code, and (ii) a description of the index structure of a sparse matrix. Our approach is to embed statement instances into a Cartesian product of statement iteration and data spaces, and to produce efficient sparse code by identifying common enumerations for multiple references to sparse matrices. The approach works for imperfectly-nested codes with dependences, and produces sparse code competitive with ...

12 Light field mapping: efficient representation and hardware rendering of surface light fields

Wei-Chao Chen, Jean-Yves Bouguet, Michael H. Chu, Radek Grzeszczuk
July 2002   **ACM Transactions on Graphics (TOG) , Proceedings of the 29th annual conference on Computer graphics and interactive techniques**, Volume 21 Issue 3

Full text available: pdf(7.79 MB)   Additional Information: full citation, abstract, references, citings, index terms

A light field parameterized on the surface offers a natural and intuitive description of the view-dependent appearance of scenes with complex reflectance properties. To enable the use of surface light fields in real-time rendering we develop a compact representation suitable for an accelerated graphics pipeline. We propose to approximate the light field data by partitioning it over elementary surface primitives and factorizing each part into a small set of lower-dimensional functions. We show th ...

Keywords: compression algorithms, image-based rendering, rendering hardware, texture

mapping

13 Multimedia data indexing: A PCA-based similarity measure for multivariate time series
Kiyoung Yang, Cyrus Shahabi
November 2004 **Pr ceedings f the 2nd ACM international w rkshop on Multimedia databases**
Full text available: pdf(207.48 KB)   Additional Information: full citation, abstract, references, index terms

Multivariate time series (MTS) datasets are common in various multimedia, medical and financial applications. We propose a similarity measure for MTS datasets, <i>Eros</i> <i>E</i>xtended F<i>ro</i>beniu<i>s</i> norm), which is based on Principal Component Analysis (PCA). <i>Eros</i> applies PCA to MTS datasets represented as matrices to generate principal components and associated eigenvalues. These principal components and eigenvalues are then used to ...

Keywords: multivariate time series, nearest neighbor search, principal component analysis, similarity measure, singular value decomposition

14 Performance of distributed sparse Cholesky factorization with pre-scheduling
S. Venugopal, V. K. Naik, J. Saltz
December 1992 **Proceedings of the 1992 ACM/IEEE conference on Supercomputing**
Full text available: pdf(978.77 KB)   Additional Information: full citation, references, citings, index terms

15 Compiling parallel code for sparse matrix applications
Vladimir Kotlyar, Keshav Pingali, Paul Stodghill
November 1997 **Proceedings of the 1997 ACM/IEEE conference on Supercomputing (CDROM)**
Full text available: pdf(161.83 KB)   Additional Information: full citation, abstract, references, citings

We have developed a framework based on relational algebra for compiling efficient sparse matrix code from dense DO-ANY loops and a specification of the representation of the sparse matrix. In this paper, we show how this framework can be used to generate parallel code, and present experimental data that demonstrates that the code generated by our *Bernoulli* compiler achieves performance competitive with that of hand-written codes for important computational kernels.

Keywords: parallelizing compilers, sparse matrix computations

16 Can an APL workspace be used as a data base?
Karl Soop
June 1984 **ACM SIGAPL APL Quote Quad , Proceedings of the international conference on APL**, Volume 14 Issue 4
Full text available: pdf(919.35 KB)   Additional Information: full citation, abstract, references, citings, index terms

Experience from applications that use APL workspaces as data storage is reported. Different design decisions are discussed with illustrations of how APL is exploited. The final design, which achieves an utter simplicity of data representation, is described, with examples of usage. This simplicity allows a developer to concentrate on data manipulation, where the power of APL is at its best, rather than on storage techniques.

17 A generalized envelope method for sparse factorization by rows
Joseph W. H. Liu
March 1991 **ACM Transacti ns on Mathematical S ftware (TOMS)**, Volume 17 Issue 1
Full text available: pdf(1.09 MB)   Additional Information: full citation, abstract, references, citings, index terms, review

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A generalized form of the envelope method is proposed for the solution of large sparse symmetric and positive definite matrices by rows. The method is demonstated to have practical advantages over the conventional column-oriented factorization using compressed column storage or the multifrontal method using full frontal submatrices.

Keywords: elimination tree, envelope method, factorization by rows, sparse matrices

18 Run-time compilation for parallel sparse matrix computations

Cong Fu, Tao Yang
January 1996 **Proceedings of the 10th international conference on Supercomputing**

Full text available: pdf(981.00 KB)   Additional Information: full citation, references, citings, index terms

19 A sub-quadratic sequence alignment algorithm for unrestricted cost matrices

Maxime Crochemore, Gad M. Landau, Michal Ziv-Ukelson
January 2002 **Proceedings of the thirteenth annual ACM-SIAM symposium on Discrete algorithms**

Full text available: pdf(1.04 MB)   Additional Information: full citation, abstract, references, citings

The classical algorithm for computing the similarity between two sequences [36, 39] uses a dynamic programming matrix, and compares two strings of size n in $O(n^2)$ time. We address the challenge of computing the similarity of two strings in sub-quadratic time, for metrics which use a scoring matrix of unrestricted weights. Our algorithm applies to both *local* and *global* alignment computations.The speed-up is achieved by dividing the dynamic programming ...

20 PSBLAS: a library for parallel linear algebra computation on sparse matrices

Salvatore Filippone, Michele Colajanni
December 2000 **ACM Transactions on Mathematical Software (TOMS)**, Volume 26 Issue 4

Full text available: pdf(139.60 KB)   Additional Information: full citation, abstract, references, index terms, review

Many computationally intensive problems in engineering and science give rise to the solution of large, sparse, linear systems of equations. Fast and efficient methods for their soltion are very important because these systems usually occur in the innermost loop of the computational scheme. Parallelization is often necessary to achieve an acceptable level of performance. This paper presents the design, implementation, and interface of a library of Basic Linear Algebra Subroutines for sparse ...

Keywords: basic linear algebra subprograms

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21 Sparse LU factorization with partial pivoting on distributed memory machines   ▱
Cong Fu, Tao Yang
November 1996 **Proceedings of the 1996 ACM/IEEE conference on Supercomputing (CDROM)**
Full text available: 📄 pdf(371.71 KB)   Additional Information: full citation, abstract, references, citings, index terms

Sparse LU factorization with partial pivoting is important to many scientific applications, but the effective parallelization of this algorithm is still an open problem. The main difficulty is that partial pivoting operations make structures of L and U factors unpredictable beforehand. This paper presents a novel approach called S* for parallelizing this problem on distributed memory machines. S* incorporates static symbolic factorization to avoid run-time control overhead and uses nonsymme ...

22 GIOSS: text-source discovery over the Internet   ▱
Luis Gravano, Héctor García-Molina, Anthony Tomasic
June 1999 **ACM Transactions on Database Systems (TODS)**, Volume 24 Issue 2
Full text available: 📄 pdf(230.37 KB)   Additional Information: full citation, abstract, references, citings, index terms, review

The dramatic growth of the Internet has created a new problem for users: location of the relevant sources of documents. This article presents a framework for (and experimentally analyzes a solution to) this problem, which we call the text-source discovery problem. Our approach consists of two phases. First, each text source exports its contents to a centralized service. Second, users present queries to the service, which returns an ordered list of promising text sources. T ...

Keywords: Internet search and retrieval, digital libraries, distributed information retrieval, text databases

23 Compressed multi-framed signature files: an index structure for fast information retrieval   ▱
Seyit Koçberber, Fazli Can
February 1999 **Proceedings of the 1999 ACM symposium on Applied computing**
Full text available: 📄 pdf(680.36 KB)   Additional Information: full citation, references, index terms

Keywords: compression, inverted files, signature files

24   ▱
Random projection in dimensionality reduction: applications to image and text data

Ella Bingham, Heikki Mannila
August 2001 **Pr ceedings of the seventh ACM SIGKDD international conference on Knowledge discovery and data mining**

Full text available: 📄 pdf(592.18 KB)   Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>citings</u>, <u>index terms</u>

Random projections have recently emerged as a powerful method for dimensionality reduction. Theoretical results indicate that the method preserves distances quite nicely; however, empirical results are sparse. We present experimental results on using random projection as a dimensionality reduction tool in a number of cases, where the high dimensionality of the data would otherwise lead to burden-some computations. Our application areas are the processing of both noisy and noiseless images, and i ...

Keywords: dimensionality reduction, high-dimensional data, image data, random projection, text document data

25 The Multifrontal Solution of Indefinite Sparse Symmetric Linear
I. S. Duff, J. K. Reid
September 1983 **ACM Transactions on Mathematical Software (TOMS)**, Volume 9 Issue 3

Full text available: 📄 pdf(1.61 MB)   Additional Information: <u>full citation</u>, <u>references</u>, <u>citings</u>, <u>index terms</u>

26 A New Implementation of Sparse Gaussian Elimination
Robert Schreiber
September 1982 **ACM Transactions on Mathematical Software (TOMS)**, Volume 8 Issue 3

Full text available: 📄 pdf(1.05 MB)   Additional Information: <u>full citation</u>, <u>references</u>, <u>citings</u>, <u>index terms</u>

27 Poster papers: Topics in 0--1 data
Ella Bingham, Heikki Mannila, Jouni K. Seppänen
July 2002 **Proceedings of the eighth ACM SIGKDD international conference on Knowledge discovery and data mining**

Full text available: 📄 pdf(617.62 KB)   Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>index terms</u>

Large 0--1 datasets arise in various applications, such as market basket analysis and information retrieval. We concentrate on the study of topic models, aiming at results which indicate why certain methods succeed or fail. We describe simple algorithms for finding topic models from 0--1 data. We give theoretical results showing that the algorithms can discover the epsilon-separable topic models of Papadimitriou et al. We present empirical results showing that the algorithms find natural topics ...

28 Special issue on spatial database systems: Management of multidimensional discrete data
Peter Baumann
October 1994 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 3 Issue 4

Full text available: 📄 pdf(2.30 MB)   Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>citings</u>

Spatial database management involves two main categories of data: vector and raster data. The former has received a lot of in-depth investigation; the latter still lacks a sound framework. Current DBMSs either regard raster data as pure byte sequences where the DBMS has no knowledge about the underlying semantics, or they do not complement array structures with storage mechanisms suitable for huge arrays, or they are designed as specialized systems with sophisticated imaging functionality, but n ...

Keywords: Multimedia database systems, image database systems, spatial index, tiling

29
A software package for sparse orthogonal factorization and updating

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Ove Edlund
December 2002 **ACM Transactions on Mathematical Software (TOMS)**, Volume 28 Issue 4

Full text available: pdf(490.01 KB)   Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>index terms</u>

Although there is good software for sparse QR factorization, there is little support for updating and downdating, something that is absolutely essential in some linear programming algorithms, for example. This article describes an implementation of sparse LQ factorization, including block triangularization, approximate minimum degree ordering, symbolic factorization, multifrontal factorization, *and* updating and downdating. The factor Q is not retained. The updating algorithm expands the n ...

Keywords: Sparse matrix, downdating, orthogonal factorization, software, updating

30 <u>Coarse-grain parallel programming in Jade</u>
Monica S. Lam, Martin C. Rinard
April 1991   **ACM SIGPLAN Notices , Proceedings of the third ACM SIGPLAN symposium on Principles and practice of parallel programming**, Volume 26 Issue 7
Full text available: pdf(1.23 MB)   Additional Information: <u>full citation</u>, <u>references</u>, <u>citings</u>, <u>index terms</u>

31 <u>The design of a high performance information filtering system</u>
Timothy A. H. Bell, Alistair Moffat
August 1996 **Proceedings of the 19th annual international ACM SIGIR conference on Research and development in information retrieval**
Full text available: pdf(1.15 MB)   Additional Information: <u>full citation</u>, <u>references</u>, <u>citings</u>, <u>index terms</u>

32 <u>MPEG-4 Video transmission over wireless networks: a link level performance study</u>
Ji-An Zhao, Bo Li, Chi-Wah Kok, Ishfaq Ahmad
March 2004 **Wireless Networks**, Volume 10 Issue 2

Full text available: pdf(306.85 KB)   Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>index terms</u>

With the scalability and flexibility of the MPEG-4 and the emergence of the broadband wireless network, wireless multimedia services are foreseen to become deployed in the near future. Transporting MPEG-4 video over the broadband wireless network is expected to be an important component of many emerging multimedia applications. One of the critical issues for multimedia applications is to ensure that the quality-of-service (QoS) requirement to be maintained at an acceptable level. This is further ...

Keywords: DBMAP with marked transitions, DBMAP/PH/1 priority queue, HMM channel, PH-type distribution

33 <u>Homomorphic factorization of BRDFs for high-performance rendering</u>
Michael D. McCool, Jason Ang, Anis Ahmad
August 2001 **Proceedings of the 28th annual conference on Computer graphics and interactive techniques**
Full text available: pdf(2.33 MB)   Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>citings</u>, <u>index terms</u>

A bidirectional reflectance distribution function (BRDF) describes how a material reflects light from its surface. To use arbitrary BRDFs in real-time rendering, a compression technique must be used to represent BRDFs using the available texture-mapping and computational capabilities of an accelerated graphics pipeline. We present a numerical technique, homomorphic factorization, that can decompose arbitrary BRDFs into products of two or more factors of lower dimensionality, each factor de ...

Keywords: *hardware accelerated rendering and shading*

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34 Implementation and computational results for the hierarchical algorithm for making sparse matrices sparser

S. Frank Chang, S. Thomas McCormick
September 1993 **ACM Transactions on Mathematical Software (TOMS)**, Volume 19 Issue 3

Full text available: pdf(1.52 MB)   Additional Information: full citation, abstract, references, index terms, review

If A is the (sparse) coefficient matrix of linear-equality constraints, for what nonsingular T is A = TA as sparse as possible, and how can it be efficiently computed? An efficient algorithm for this Sparsity Problem (SP) would be a valuable preprocessor for linearly constrained optimization problems. In a companion paper we developed a two-pass approach to solve SP called the Hierarchical Algorithm. In this paper we report on how we implem ...

35 A column pre-ordering strategy for the unsymmetric-pattern multifrontal method

Timothy A. Davis
June 2004 **ACM Transactions on Mathematical Software (TOMS)**, Volume 30 Issue 2

Full text available: pdf(401.79 KB)   Additional Information: full citation, abstract, references, citings, index terms

A new method for sparse LU factorization is presented that combines a column pre-ordering strategy with a right-looking unsymmetric-pattern multifrontal numerical factorization. The column ordering is selected to give a good a priori upper bound on fill-in and then refined during numerical factorization (while preserving the bound). Pivot rows are selected to maintain numerical stability and to preserve sparsity. The method analyzes the matrix and automatically selects one of three pre-ordering ...

Keywords: linear equations, multifrontal method, ordering methods, sparse nonsymmetric matrices

36 Automatic subject indexing using an associative neural network

Yi-Ming Chung, William M. Pottenger, Bruce R. Schatz
May 1998 **Proceedings of the third ACM conference on Digital libraries**

Full text available: pdf(1.26 MB)   Additional Information: full citation, references, citings, index terms

37 Multiresolution green's function methods for interactive simulation of large-scale elastostatic objects

Doug L. James, Dinesh K. Pai
January 2003 **ACM Transactions on Graphics (TOG)**, Volume 22 Issue 1

Full text available: pdf(8.69 MB)   Additional Information: full citation, abstract, references, citings, index terms

We present a framework for low-latency interactive simulation of linear elastostatic models, and other systems arising from linear elliptic partial differential equations, which makes it feasible to interactively simulate large-scale physical models. The deformation of the models is described using precomputed Green's functions (GFs), and runtime boundary value problems (BVPs) are solved using existing Capacitance Matrix Algorithms (CMAs). Multiresolution techniques are introduced to control the ...

Keywords: Capacitance matrix, Green's function, deformation, elastostatic, fast summation, force feedback, interactive real-time applications, lifting scheme, real-time, updating, wavelets

38 Automatic parsing for content analysis

Frederick J. Damerau
June 1970 **Communications of the ACM**, Volume 13 Issue 6

Full text available: pdf(4.07 MB)   Additional Information: full citation, abstract, references, citings

Although automatic syntactic and semantic analysis is not yet possible for all of an unrestricted

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natural language text, some applications, of which content analysis is one, do not have such a stringent coverage requirement. Preliminary studies show that the Harvard Syntactic Analyzer can produce correct and unambiguous identification of the subject and object of certain verbs for approximately half of the relevant occurences. This provides a degree of coverage for content analysis variable ...

Keyw rds: content analysis, information retrieval, language analysis, natural language processing, parsing, syntactic analysis, text processing

39 Machine learning in automated text categorization

Fabrizio Sebastiani

March 2002 **ACM Computing Surveys (CSUR)**, Volume 34 Issue 1

Full text available: pdf(524.41 KB)   Additional Information: full citation, abstract, references, citings, index terms

The automated categorization (or classification) of texts into predefined categories has witnessed a booming interest in the last 10 years, due to the increased availability of documents in digital form and the ensuing need to organize them. In the research community the dominant approach to this problem is based on machine learning techniques: a general inductive process automatically builds a classifier by learning, from a set of preclassified documents, the characteristics of the categories. ...

Keywords: Machine learning, text categorization, text classification

40 Efficiently supporting ad hoc queries in large datasets of time sequences

Flip Korn, H. V. Jagadish, Christos Faloutsos

June 1997 **ACM SIGMOD Record , Proceedings of the 1997 ACM SIGMOD international conference on Management of data**, Volume 26 Issue 2

Full text available: pdf(1.43 MB)   Additional Information: full citation, abstract, references, citings, index terms

Ad hoc querying is difficult on very large datasets, since it is usually not possible to have the entire dataset on disk. While compression can be used to decrease the size of the dataset, compressed data is notoriously difficult to index or access. In this paper we consider a very large dataset comprising multiple distinct time sequences. Each point in the sequence is a numerical value. We show how to compress such a dataset into a format that supports ad hoc querying, provided ...

Results 21 - 40 of 200   Result page: previous   1   **2**   3   4   5   6   7   8   9   10   next

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